

## CLAIMS

What is claimed is:

1 1. A method for a dynamic information connection engine, comprising:  
2 detecting at least one user action on at least one client computer and, in response,  
3 determining at least one user is searching for supported information;  
4 extracting query information from the at least one user action, wherein the query  
5 information includes at least one category of the supported information;  
6 automatically selecting at least one supplier of the supported information using at least  
7 one server in response to the query information;  
8 transferring at least one query including the query information among the selected at  
9 least one supplier via at least one network; and  
10 generating at least one result list in response to at least one query response, wherein  
11 the at least one result list includes response information generated from the at least one query  
12 response and query status information.

1 2. The method of claim 1, further comprising providing the at least one result list to the  
2 at least one user.

1 3. The method of claim 1, wherein the at least one result list further includes at least one  
2 electronic link to the selected at least one supplier.

1 4. The method of claim 1, wherein detecting further comprises:

monitoring the at least one user action by capturing Uniform Resource Locators (URLs) from a browser of the at least one client computer; comparing a root portion of the captured URL with at least one list of strings stored by the at least one client computer; and forwarding a root-matching URL to the at least one server, wherein determinations are made whether the at least one user action is a request for travel information and whether the at least one user action contains enough information to be the at least one itinerary component.

5. The method of claim 1, further comprising establishing at least one coupling to the selected at least one supplier via the at least one network, wherein establishing includes at least one method selected from a group consisting of requesting at least one web page from at least one web site of the at least one supplier, and using at least one proprietary coupling among the at least one supplier and at least one intermediary database, wherein the at least one intermediary database comprises information on available inventory of the at least one supplier.

6. The method of claim 1, further comprising establishing at least one coupling between the at least one client computer and the at least one server, wherein the at least one client computer dynamically constructs a name of the at least one server by concatenating string fragments including a string constant representing a fixed base part of a name of the at least one server, at least one random number converted into at least one character string, and a string constant representing at least one domain in which the at least one server is located.



1 11. A method for locating and scheduling travel itinerary components in real time,  
2 comprising:  
3 detecting at least one user action on at least one client computer and, in response,  
4 determining at least one user is searching for travel information;  
5 extracting at least one itinerary component from the at least one user action;  
6 automatically selecting at least one supplier of the at least one itinerary component  
7 using at least one server;  
8 transferring at least one query among the selected at least one supplier via at least one  
9 network, wherein the at least one query is a request for purchase information on the at least  
10 one itinerary component; and  
11 presenting the at least one user with at least one result list in response to at least one  
12 query response, wherein the at least one result list includes the purchase information, at least  
13 one electronic link to the at least one supplier, and query status information.

1 12. The method of claim 11, wherein the at least one itinerary component comprises at  
2 least one component selected from a group consisting of airline reservations, lodging  
3 reservations, and ground transportation reservations.

1 13. The method of claim 11, wherein detecting at least one user action further comprises:  
2 monitoring the at least one user action by capturing Uniform Resource Locators  
3 (URLs) from a browser of the at least one client computer;  
4 comparing a root portion of the captured URL with at least one list of strings stored by  
5 the at least one client computer; and

forwarded

6 forwarding a root-matching URL to the at least one server, wherein determinations are  
7 made whether the at least one user action is a request for travel information and whether the at  
8 least one user action contains enough information to be the at least one itinerary component.

1 14. The method of claim 13, further comprising determining whether the at least one user  
2 action contains enough information to be the at least one itinerary component.

1 15. The method of claim 14, further comprising opening at least one sub-window on the  
2 browser when the at least one user action includes enough information to be the at least one  
3 itinerary, wherein the sub-window accepts entry of the at least one itinerary.

1 16. The method of claim 14, further comprising capturing information from the at least  
2 one user action when it is determined that the at least one user action contains enough  
3 information to be the at least one itinerary component.

1 17. The method of claim 14, further comprising capturing information from a third party  
2 web site when it is determined that the at least one user action contains enough information to  
3 be the at least one itinerary component.

1 18. The method of claim 13, further comprising updating the at least one list of strings,  
2 wherein updating includes transferring at least one updated list of strings from the at least one  
3 server.



1 23. The method of claim 22, wherein the at least one electronic site is selected from a  
2 group consisting of at least one supplier web site, at least one captive purchase web site, and  
3 at least one third party web site.

1 24. The method of claim 11, further comprising:  
2 tracking a purchase of the at least one itinerary component; and  
3 maintaining proof of the purchase.

1 25. The method of claim 24, wherein the tracking and the maintaining comprise  
2 maintaining at least one buy-tracking list of string pairs on the at least one client computer,  
3 wherein a first string pair element includes a URL of a receipt web page of the at least one  
4 supplier, wherein a second string pair element includes an extraction specifier that specifies a  
5 purchase transaction identification string within the receipt web page, and wherein the  
6 purchase transaction identification string is used as proof of purchase transaction origination.

1 26. The method of claim 11, wherein automatically selecting at least one supplier  
2 comprises performing at least one evaluation using at least one search factor selected from a  
3 group consisting of information from the at least one itinerary component, preferences of the  
4 at least one user, personal information on the at least one user, at least one previous search  
5 history of the at least one supplier, and at least one search history of at least one search of a  
6 similar type and by a similar user.

1 27. The method of claim 11, further comprising filtering the at least one query response  
2 using criteria selected from a group consisting of relative item pricing, preferences of the at  
3 least one user, personal information on the at least one user, sort criteria of the at least one  
4 user, past purchasing decisions of the at least one user, and past purchasing decisions of at  
5 least one aggregate group of users.

1 28. The method of claim 11, further comprising sorting the at least one list using at least  
2 one sorting criteria from the at least one user.

1 29. The method of claim 28, wherein the sorting is performed on the at least one client  
2 computer.

1 30. The method of claim 11, further comprising:  
2 generating at least one travel request object in response to the extracted at least one  
3 itinerary component, wherein the at least one travel request object contains information on the  
4 at least one itinerary component and identifying information for the selected at least one  
5 supplier; and  
6 optimizing the at least one travel request object.

1 31. The method of claim 11, further comprising tracking at least one time period selected  
2 from a group consisting of session periods, itinerary search time periods, result expiration  
3 time periods, and at least one travel category search result time period.





digital assistants, hand-held computers, cellular telephones, communication devices, and  
vehicle telematic systems.

39. The method of claim 11, wherein the at least one network comprises the Internet.

40. A system for locating and scheduling travel itinerary components in real time,  
comprising:

at least one client computer that detects at least one user action and determines  
whether at least one user is searching for travel information;

at least one server coupled to the at least one client computer, wherein at least one  
itinerary component is extracted from the at least one user action, wherein at least one  
supplier of the at least one itinerary component is automatically selected, wherein at least one  
query is transferred among the selected at least one supplier via at least one network, wherein  
the at least one query is a request for purchase information on the at least one itinerary  
component, wherein the at least one user is presented with at least one result list in response  
to at least one query response, wherein the at least one result list includes the purchase  
information, query status information, and at least one electronic link that supports purchase  
of the at least one itinerary component.

41. The system of claim 40, wherein the at least one travel component comprises at least  
one component selected from a group consisting of airline reservations, lodging reservations,  
and ground transportation reservations.

1 42. The system of claim 40, wherein detecting at least one user action further comprises:  
2 monitoring the at least one user action by capturing Uniform Resource Locators  
3 (URLs) from a browser of the at least one client computer;  
4 comparing a root portion of the captured URL with at least one list of strings stored by  
5 the at least one client computer; and  
6 forwarding a root-matching URL to the at least one server, wherein determinations are  
7 made whether the at least one user action is a request for travel information and whether the at  
8 least one user action contains enough information to be the at least one itinerary component.

1 43. The system of claim 42, wherein the at least one client computer comprises at least  
2 one browser sub-window that is opened when the at least one user action includes enough  
3 information to be the at least one itinerary, wherein the sub-window accepts entry of the at  
4 least one itinerary component.

1 44. The system of claim 42, wherein information is captured from the at least one user  
2 action, and it is determined that the at least one user action contains enough information to be  
3 the at least one itinerary component.

1 45. The system of claim 40, wherein the at least one itinerary component is received from  
2 at least one location selected from a group consisting of the at least one client computer.

1 46. The system of claim 40, wherein at least one coupling is established to the selected at  
2 least one supplier via the at least one network, wherein the establishment includes at least one

3 method selected from a group consisting of requesting at least one web page from at least one  
 4 web site of the at least one supplier, and using at least one proprietary coupling among the at  
 5 least one supplier and at least one intermediary database, wherein the at least one intermediary  
 6 database comprises information on available inventory of the at least one supplier.

1 47. The system of claim 40, wherein the at least one client computer couples to the at least  
 2 one server by dynamically constructing a name of the at least one server by concatenating  
 3 string fragments including a string constant representing a fixed base part of a name of the at  
 4 least one server, at least one random number converted into at least one character string, and a  
 5 string constant representing at least one domain in which the at least one server is located.

1 48. The system of claim 40, wherein a factory logic section of the at least one server  
 2 creates and populates at least one object in response to at least one request from at least one  
 3 other logic section, wherein the at least one object is used in at least one session of the at least  
 4 one user.

1 49. The system of claim 48, wherein the at least one object comprises at least one user  
 2 information object based on information of the at least one user, wherein the at least one user  
 3 information object is stored in at least one database upon completion of the at least one  
 4 session, wherein the factory logic searches the at least one database for the at least one user  
 5 information object upon initiation of at least one subsequent session.

1 50. The system of claim 48, wherein the at least one object comprises at least one session  
2 information object based on information of the at least one session.

1 51. The system of claim 48, wherein the at least one object comprises at least one travel  
2 request object based on information of the at least one itinerary component, wherein the at  
3 least one travel request object includes information identifying the at least one supplier.

52. The system of claim 51, wherein the at least one object comprises at least one travel query object that is instantiated with the at least one travel request object, wherein upon instantiation the at least one travel query object obtains at least one thread and at least one search adapter for each of the at least one suppliers, wherein the at least one thread and the at least one search adapter control the transfer of the at least one query.

1 53. The system of claim 40, wherein at least one coupling is provided among the at least  
2 one client computer and at least one electronic site from which the at least one user can  
3 purchase at least one selected itinerary component, wherein the at least one electronic site is  
4 selected from a group consisting of at least one supplier web site, at least one third party web  
5 site, at least one interface among the at least one server and the at least one supplier, and at  
6 least one database.

1 54. The system of claim 40, wherein a purchase of the at least one travel component is  
2 tracked and a proof of the purchase is maintained.





3 detecting at least one user action on at least one client computer and, in response,  
4 determining at least one user is searching for supported information;  
5 extracting query information from the at least one user action, wherein the query  
6 information includes at least one category of the supported information;  
7 automatically selecting at least one supplier of the supported information using at least  
8 one server in response to the query information;  
9 transferring at least one query including the query information among the selected at  
10 least one supplier via at least one network; and  
11 generating at least one result list in response to at least one query response, wherein  
12 the at least one result list includes response information generated from the at least one query  
13 response and query status information.

1 62. A method for locating and scheduling travel itinerary components in real time,  
2 comprising:  
3 detecting at least one user action on at least one client computer and, in response,  
4 determining at least one user is searching for travel information;  
5 extracting at least one itinerary component from the at least one user action;  
6 automatically selecting at least one supplier of the at least one itinerary component  
7 using at least one server;  
8 transferring at least one query among the selected at least one supplier via at least one  
9 network, wherein the at least one query is a request for purchase information on the at least  
10 one itinerary component;



